Anthony "Tony" Fairfax

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Experience Highlights:

- · Demographic, Geographic & Voter Data Analysis
- Multiple GIS Software/Census Data Skillsets
- Redistricting Plan Development & Analysis
- Redistricting Expert Reports & Testimony
- · Redistricting Presentations & Training
- ESRI ArcGIS Map Applications & Dashboards
- Maptitude for Redistricting Proficiency
- Professional Presentations/Training Experience

Education:

Master of Geospatial Information Science and Technology (2016)
North Carolina State University, Raleigh, North Carolina

Graduate Certificate in Geographic Information Systems (2016)
North Carolina State University, Raleigh, North Carolina

Bachelor of Science Degree in Electrical Engineering (1982) Virginia Tech, Blacksburg, Virginia

Work Experience:

CensusChannel LLC, Hampton, VA (2009 - Present)

CEO & Principal Consultant - Providing overall project management and operations as well as primary consulting services for clients. Also responsible for customer acquisition and support. Core tasks include GIS-centered services centering on: redistricting support (extensive use and analysis of traditional redistricting principles); demographic/socioeconomic, geographic, and voting data; GIS, Census Data, and Redistricting training; GIS data processing/conversion; expert redistricting plan development, analysis, depositions, testimony, and training. Major clientele and projects include:

- The ACLU, New York, NY (2021 Present) Providing expert plan development services centering
 on the states of Alabama and Arkansas.
- The Power Coalition, New Orleans, LA (2021 Present) Providing technical advice and input for building an equitable redistricting process in Louisiana for communities, legislators, and organizations. Providing analysis and plan alternatives for Louisiana state legislative House and Senate districts where Black voters could elect a candidate of choice.
- Crescent City Media Group, New Orleans, LA (2021) Provided redistricting training to the PreRedistricting Lab. Training centers on various educational presentations and hands-on sessions to community leaders and local/state legislators.
- NAACP Legal Defense Fund (LDF), New York, NY (2020 Present) Providing redistricting development and analysis of various district configurations for city, county, and state-level plans.
- Crowd Academy [an SCSJ sponsored effort], Durham, NC (2020 Present) Providing redistricting
 training and support. Training centers on presentations on "How the Lines are Drawn" which
 focuses on pre-plan development and plan development activities of redistricting. The target
 attendee includes individuals in Georgia, North Carolina, South Carolina, Tennessee, and Texas. The
 effort also includes providing mentorship to Academy Fellows and Academy Mentors.

- City of Everett, WA, Everett, WA (2020) Provided advice, consultation, and mapping services as
 Districting Master to the city of Everett, WA's Districting Commission. Efforts centered on the
 development of the city's first districting plan. Also assisted with answering questions at public
 forums and developed an ArcGIS web map application for public access of all plans.
- NAACP, Baltimore, MD (2018 Present) Providing GIS consulting services via the NAACP (as fiscal agent) to the Racial Equity Anchor Collaborative (consisting of the Advancement Project, APIA Health Forum, Demos, Faith in Action, NAACP, National Urban League, NCAI, Race Forward, and Unidos US). Efforts include the development of the Racial Equity 2020 Census Data Hub. The Data Hub utilized ESRI's Hub Cloud platform, that centralized web maps, mapping applications, and dashboards into a common platform that enabled collaborative partners to locate hard-to-count areas by major race or ethnicity.
- Southern Echo, Jackson, MS (2018 Present) Providing redistricting training sessions to Southern Echo partners throughout the south. Also provided GIS data, maps, and training to Southern Echo, community leaders, stakeholders, and subsequently in the field to groups working in the following states; Alabama, Arkansas, Georgia, Florida, Louisiana, Mississippi, New Mexico, North Carolina, South Carolina, and Texas. Specifically, deliverables include map-centered projects centering on education, GOTV, and redistricting.
- Campaign Legal Center, Washington, DC (2018 –2021) Developed illustrative redistricting plans, associated expert reports, depositions, and testimony in the Holloway v City of Virginia Beach court case. The Illustrative plans included two majority Hispanic, Black, and Asian combined districts for the purpose of providing evidence of the first prong in Gingles for the city of Virginia Beach.
- Southern Coalition for Social Justice [SCSJ], Durham, NC (2015 2018) Provided several expert reports, depositions, and testimony for multiple redistricting court cases in North Carolina. Testimony, depositions, and reports included numerous plans at the congressional, state Senate, state House, and local jurisdiction level. Analyses covered certain district characteristics, including population deviation, political subdivision splits, partisan performance, and incumbent effect analysis.
- The Rehab Crew, Durham, NC (2017) Provided geospatial & demographic analysis as well as website development and the creation of a proprietary application for the use of targeting real estate investment properties.
- Congressman G.K. Butterfield, NC (2016 & 2021) Developed several congressional district plan alternatives for the State of North Carolina. Provided analyses on alternative district configurations.
- Alabama Democratic Conference (ADC), Montgomery, AL (2015 2016) Developed state Senate
 and House redistricting plans for the state of Alabama in response to the ADC v Alabama court
 case. Also, provided a series of thematic maps depicting areas added from the previous plan to the
 enacted plan, displaying concentrations of African American voters that were added to the enacted
 plan.
- Net Communications, Tallahassee, FL (2014 2015) Generated offline mapping and online web services (ArcGIS.com) of client's energy company's resources and organizational assets. Mapping included demographic, socioeconomic, and other resources of the energy company.
- National NAACP Office of General Counsel, Baltimore, MD (2012 2013) Provided project
 management and developmental support for the creation of a final report for the NAACP National
 Redistricting Project. Provided planning, organizing, supplemental writing, and interfacing with
 graphics entity for the complete development of the final report.
- Congressional Black Caucus Institute (CBC Institute), Washington, DC (2011 2012) Provided contract duties as the Project Director and Consulting Demographer for the CBC Institute's

Redistricting Project. Provided project management, redistricting plan development, review, analysis, advice, and answers to various questions pertaining to redistricting plans, principles, and processes. Focus included districts where Black voters could elect a candidate of choice.

- Mississippi NAACP, Jackson, MS (2011) Developed state Senate plans and analyzed enacted plans that were developed by the State Court.
- African American Redistricting Collaborative (AARC) of California, Los Angeles, CA (2011) Provided demographic and redistricting contracted services. Responsible for developing congressional, state Senate, and state assembly plans for the collaborative. Special focus was given to the southern Los Angeles area (SOLA) and the Bay Area region. In addition to plan development, several socioeconomic maps were developed to show various communities of interest commonalities.

Also, developed a demographic profile using maps and reports of California's congressional, state Senate, and state Assembly districts for the purpose of preparing for the redistricting plan development process by identifying areas of growth throughout the state. The profiles included data from the American Community Survey (ACS) 2005-2009 and the 2010 Census.

- The Advancement Project, Washington, DC (2011) Provided redistricting plan development services and training. Included was the development of a base map for a new seven (7) district plan in New Orleans that was further developed by community groups in Louisiana. The second effort included training a staff person on the use of Maptitude for Redistricting as well as on various redistricting scenarios.
- Louisiana Legislative Black Caucus (LLBC), Baton Rouge, LA (2011) Provided redistricting plan
 development services. Responsibilities included supporting the Caucus members' efforts to develop
 state House, state Senate, and congressional redistricting plans. Developed or analyzed over eighty
 different redistricting plans. The effort also included testifying in front of the Louisiana Senate and
 Governmental Affairs committee.
- Community Policy Research & Training Institute (One Voice), Jackson, MS (2011) Developed Mississippi State Senate plan along with appropriate reports and large-scaled map.
- National Black Caucus of State Legislators (NBCSL), Washington, DC (2010) Provided services as
 the Project Director for a 2010 census outreach effort. Developed proposal and managed personnel
 to generate and execute a strategy to utilize Black state Senate and House legislators to place
 targeted posters in select hard-to-count (HTC) areas throughout the country.
- Duke University's Center for REGSS & SCSJ, Durham, NC (2010 2011) Contracted to serve as one
 of two Project Coordinators to support an expert preparation workshop hosted by Duke
 University's REGSS and the SCSJ.

Project Coordinator duties included developing, managing, and providing hands-on training for the Political Cartographer's side of a week-long intensive "redistricting expert" preparation workshop. The workshop trained 18 political cartographers, who came from various parts of the country, on all aspects of redistricting plan development and principles. Also, two hands-on redistricting scenarios were created to train large audiences on the plan development process.

Democracy South, Virginia Beach, VA (2004 - 2008)

Senior Technical Consultant - Provided technical, GIS mapping, data analysis, and management support for several projects and civic engagement-related efforts. Major project efforts included:

 Senior Technical Consultant for the National Unregistered Voter Map. Developed a web-based interactive map that allowed visitors to view state/county level information pertaining to the number of unregistered voters (2009)

- Co-Director of the Hampton Roads Missing Voter Project (a nonpartisan nonprofit voter
 engagement effort to increase voter participation with a focus on underrepresented population
 groups). The effort covered the seven major Independent cities in Hampton Roads. Responsibilities
 included co-managing the overall civic engagement effort and was solely responsible for integrating
 and processing Catalist voter data into targeting maps and walk lists for all focus areas. Directly
 Responsible for overseeing the operations in Hampton, Newport News, Portsmouth, and Suffolk,
 Virginia (2008)
- Senior Technical Consultant for Civic Engagement Efforts. Provided telephone technical voter database support to 17 USAction state partners in 2004; and 12 USAction state partners in 2006. Trained client on VBASE voter data software; Performed voter data conversion; and voter targeting assistance.

Congressional Black Caucus Institute, Redistricting Project, Washington D.C. (2001 - 2003)

Consulting Demographer - Provided services that included the development, review, and analysis of over 75 congressional district plans. Responsible for all setup and configuration of hardware and GIS software and performed all development and analyses of redistricting plans. Congressional district plans were developed for 22 states. Also, performed as a redistricting expert advisor in a consolidated U.S. District Court Voting Rights case in Alabama.

National Voter Fund, Washington, D.C. (2000)

GIS Consultant (in a consulting partnership of Hagens & Fairfax) - Developed hundreds of precinct targeting maps for a civic engagement effort designed to increase the turnout in the November 2000 election. Efforts included: geocoding voter data, census data integration, and precinct mapping.

Norfolk State University, Poli. Science & Computer Science Dept., Norfolk, Virginia (1996 - 2001) Adjunct Faculty - Provided instruction to students for BASIC Programming, Introduction to Computer Science, and Computer Literacy courses.

GeoTek. Inc. (formally GIS Associates), Virginia Beach, VA (1992 - 1995)

Consultant and Co-owner - Provided geodemographic research and analysis; client technical & training support; hardware/software system installation; and redistricting manual/ brochure development. Major clients and tasks included:

- New York City Housing Authority Redistricting Training
- Maryland State Office of Planning Redistricting Tech Support
- City of Virginia Beach, VA Planning Dept. Redistricting Training/Tech Support
- City of Norfolk, VA Registrar Redistricting Training/Tech Support
- City of Chesapeake, VA Registrar Precinct Realignment

Norfolk State University, Political Science Dept., Norfolk, Virginia (1991 - 1999)

GIS Consultant - Provided a variety of geographic and demographically related tasks. Major Redistricting related tasks included:

 Installed and operated the LogiSYS ReapS software that was used to perform the bulk of redistricting plans. Performed the intricate ReapS processing of the U.S. Census Bureau Topographically Integrated Geographic Encoded Referencing (TIGER) line files, Public Law 94-171 (PL94-171) demographic data, and the STF socioeconomic data series.

- Developed over 200 hundred redistricting plans, located in over 60 jurisdictions, in the states of Florida, Louisiana, North Carolina, Texas, and Virginia. Developed plans from city/county to legislative to congressional district.
- Traveled to and trained several university faculty personnel on setting up and utilizing the ReapS redistricting system. Also, trained on redistricting plan development principles.

Major GIS-related tasks included:

- Performed a study commissioned by the U.S. Department of Transportation to analyze the ethnic
 differences in commuting behavior. This study extensively utilized the Summary Tape File 3 A (STF3
 A) and Public Microdata Sample (PUMS) data to locate, map, and report the frequency and average
 travel time to and from work for: Miami, FL MSA; Kansas City, MO-KS MSA; and Detroit, MI MSA.
- Performed a study funded by the City of Norfolk, VA, and NSU School of Business that determined and analyzed the trade area of a section located in Norfolk, VA. Major duties included: geocoding customer addresses, producing address point maps, and developing demographic reports for the project.
- Performed a study commissioned by the U.S. Department of Housing and Urban Development
 (HUD) to revitalize a neighborhood located in Norfolk, VA. The purpose of the GIS component was
 to first establish a socioeconomic base-line then track the progress of the revitalized area as well
 select surrounding areas. Geocoded address locations, generated point as well as demographic
 thematic maps, and produced reports of the target areas.
- Provided demographic analysis of proposed newly incorporated areas in Florida for local Florida civic organizations.

Cooperative Hampton Roads Org. for Minorities in Engineering, Norfolk, VA (1991 - 1992)

Computer Consultant - Designed and developed a menu-driven student database, used to track hundreds of minority Junior High and High School students that were interested in pursuing science or engineering degrees.

Norfolk State University, School of Education, Norfolk VA (1990 - 1991)

Technical Consultant/Computer Lab Manager- Provided a variety of support to include hardware and software installation; faculty workshops; course instruction; Network Administrator; and technical support.

Engineering and Economics Research (EER) Systems (1989)

Technical Consultant - Coordinated and participated in writing, editing, and formatting technical test documents; central role in the development of the Acceptance Test Procedures for the initial phase of a multi-million dollar Combat Maneuver Training Complex (CMTC) in Hohenfels, Germany; the final review and editing of all test documentation.

Executive Training Center (ETC). Newport News, VA (1988 - 1989)

Vice President & Co-founder - Managed over 11 part-time and full-time employees; assisted in developing and implementing company policies; performed the duties of the Network Administrator for a Novell-based computer training network; and taught several courses by substituting for instructors when necessary.

Engineering & Economics Research (EER) Systems. Newport News, VA (1986 - 1987)

Hardware Design Engineer and Electronics Engineer - Provided engineering and select project management support for the development of the following million/multi-million dollar project efforts:

- Baseline Cost Estimate (BCE) to be used in the procurement of the Combat Maneuver Training Complex - Instrumentation System (CMTC-IS)
- Operational and Maintenance (O&M) Support Plan at the National Training Center (NTC)

- Quality Assurance Surveillance Plan for the O&M Support Plan at the NTC; Configuration Management Plan for CMTC
- Requirements Operational Capabilities (ROC) Analysis for an instrumentation System at the U.S.
 Army Ranger School, Georgia;
- ROC Analysis for an Instrumentation System at Fort Chaffee, Arkansas;
- Suggested Statement of Work for the Digital Data Entry Device (DDED); and the Concept Formulation Package and Requirements Definition to Support interface and integration of Red Flag at the NTC:
- Phase II of a multi-million dollar GIS-based concept test demonstration. Performing as Assistant Test Director (ATD) - liaison between the Government Director Army Ranges and Targets (DART) personnel and EER Systems' personnel; and assumed the role of Test Director when required (1987).
- Suggested Statement of Work (SOW) for a \$1 million procurement of Multivehicle Player Units (MVPUs) at the NTC. Performed as Project Task Manager for a team of engineers, computer programmers, and technical support personnel in the development of a position location player unit for the Army (1986).

Teledyne Hastings-Raydist, Hampton, VA (1982 - 1986)

Hardware Design Engineer - Designed and developed custom flow and vacuum measuring products; Project Manager for the production and completion of a \$.25 million flow measuring system; Electrical Engineer - Chiefly responsible for developing special products for customers.

Major Litigation & Testimony Related Efforts:

Campaign Legal Center, Washington, DC (2018 – 2020)

Developed multiple illustrative redistricting plans and associated expert reports for *Latasha Holloway v City* of *Virginia Beach* court case. The Illustrative Plans included two majority Hispanic, Black, and Asian combined (Coalition) districts for the purpose of providing evidence of the first prong in *Gingles* in the section 2 court case. The effort included an additional rebuttal, supplemental report, deposition, and testimony.

Virginia NAACP, Richmond, VA (2018)

Developed a statewide remedial plan for *Bethune-Hill v. Virginia State Bd. of Elections*. The plan corrected 11 unconstitutional racial gerrymandered state House districts in the Richmond, Peninsula, and Southside Hampton Roads areas.

Southern Coalition for Social Justice (SCSJ), Durham, NC (2018)

Developed a demonstrative remedial redistricting plan and associated expert report as well as provided a deposition for *North Carolina State Conference of NAACP Branches v. Lewis* Wake County Superior Court case. The demonstrative remedial plan corrected the two Wake County, N.C. House Districts declared by a federal court to be racially gerrymandered districts (HD33 & HD38). The expert report provided a narrative that not only discussed my results but also provided insight for the Court on how a map drawer would reasonably go about fixing racially gerrymandered districts and still comply with the state constitution's prohibition on mid-decade redistricting.

Texas NAACP, San Antonio, TX, (2017)

Provided expert report, deposition, and testimony for the *Perez v. Abbott* US Federal District Court Case. Analyses focused on certain redistricting criteria, including population deviation, compactness, political

subdivision splits, and communities of interest for congressional and House plans. Additional analysis was performed on demographic projections for certain congressional and state House districts.

Southern Coalition for Social Justice (SCSJ), Durham, NC (2015 - 2016)

Provided expert testimony, deposition, and expert report for the *City of Greensboro v The Guilford County Board of Elections* U.S. District Court Case. Deposition and report included several district plans for the city council of Greensboro, NC, and analyzed certain characteristics, including population deviation, political subdivision splits, partisan performance, and incumbent effect analysis.

Provided expert testimony and report for the *Covington v North Carolina* federal redistricting court case. The testimony included analysis from *Dickson v Rucho* (also *NAACP v North Carolina*) of compactness on state legislative House and Senate districts.

Provided expert testimony and report for the *Wright v North Carolina* federal redistricting court case. The testimony and report included analysis of population deviation, compactness, partisan impact, and incumbent residences for county commission and school board plans.

Alabama Democratic Conference (ADC), Montgomery, AL (2015 - 2016)

Developed Senate and House redistricting plans for the state of Alabama for the *ADC v Alabama* court case. Provided deposition on the creation of the plan. Also, generated a series of thematic maps depicting areas added from the previous benchmark plan to the enacted plan, displaying concentrations of African American voters that were added to the enacted plan.

Southern Coalition for Social Justice (SCSJ), Durham, NC (2014)

Provided expert testimony, report, and deposition for Federal redistricting court case, *Perez v. Perry* of Texas. The report included analysis of population extrapolations and projections for several submitted plans for select congressional and House districts.

North Carolina NAACP, Raleigh, NC (2012)

Provided expert opinions and analysis in an affidavit for the *NC NAACP v. State of North Carolina* federal redistricting case (later *Dickson v Rucho*). The affidavit included examination of compactness measurements pertaining to the Congressional, State Senate, and State House "Benchmark" plans, several approved plans, and several legislative submitted plans. The report also contained county splits for the target districts.

Southern Coalition for Social Justice (SCSJ), Durham, NC (2011)

Provided expert opinions and analysis in an affidavit for the *Moore v. State of Tennessee* redistricting case. The affidavit included analysis of county splits comparing State Senate "Benchmark" plans, the approved plan, and several legislative submitted plans.

Texas NAACP, San Antonio, TX (2011)

Provided expert report, deposition, and testimony for federal redistricting court case *Perez v. Perry*. Testimony covered the evaluation of traditional redistricting criteria of the Congressional and House approved plans compared to several proposed or legislature submitted plans.

Louisiana Legislative Black Caucus, Baton Rouge, LA (2011)

Provided expert testimony in front of the Senate and Governmental Affairs committee. Testimony included the analysis of two redistricting plans comparing ideal population deviation, political subdivision splits (Parishes), and compactness ratios. Also, developed a redistricting plan and testified in front of the House and Governmental Affairs in support of a new majority-minority (African American) congressional district in Louisiana.

Morrison & Foerster LLP, Los Angeles, CA (2004)

Provided expert report on several state Senate plans for the *Metts v. Murphy* Rhode Island court case. The report contained analyses of communities of interest areas that were not included in the state's enacted plan of the only majority-minority district.

Congressional Black Caucus Institute, Redistricting Project, Washington D.C. (2002)

Performed as the redistricting mapping expert for Congressman Hilliard in a consolidated U.S. District redistricting court case in Alabama (*Montiel v. Davis* and *Barnett v. Alabama*). Developed the submitted plan and provided advice to legal counsel for the court case.

Council of Black Elected Democrats (COBED) New York State, New York, NY (2002)

Performed as one of the redistricting experts (*Allen v Pataki/Rodriguez v Pataki*) by developing several New York State congressional district plans that were presented by COBED.

Miami-Dade, Florida (1993)

Provided expert technical redistricting support as one half of the Expert Master's Team for the remedial Plan (*Meek v. Metropolitan Dade County*). Developed over 50 commissioner district plans for the county as well as the final adopted Plan for the metro Dade County.

NAACP Legal Defense and Educational Fund (LDEF), New York, NY (1993)

Provided expert technical support for the *Shaw v. Reno* Supreme Court case (via Norfolk State University). Analyzed and compared various compactness ratios for congressional districts throughout the U.S. The results were compared to the 12th congressional district of North Carolina. Also, developed several alternative congressional district plans.

Major GIS/Demographic/Redistricting Training and Presentations:

Southern Echo (2021 - Present)

Presented multiple training sessions (11 planned) on various aspects of redistricting. Included both presentations and ultimately hands-on (Dave's Redistricting)

Crowd Academy (2020 - Present)

Presented multiple Training sessions (>25) that center on "How the lines are Drawn" which focuses on the plan development activities of redistricting.

Crescent City Media Group (2021)

Presented ten three-hour-long training sessions on various aspects of redistricting. Included both presentations and hands-on (Maptitude for Redistricting)

NAACP LDF/MALDEF Expert Convening (2021)

Provided multiple sessions to potential future experts on expert report development, giving depositions, and providing testimony.

SIF Voting Rights Convening (2021)

Presented on a panel the unique aspects and issues pertaining to the 2020 round of redistricting.

SIF Voting Rights Convening (2020)

Presented on a panel various preparatory aspects and questions that should be addressed prior to the development of plans.

Delta Days in the Nation's Capital, Washington, DC (2020)

Provided panel presentation on suggested efforts in preparation for the next round of redistricting. Plenary presentation to several hundred Delta Sigma Theta (DST) sorority sisters throughout the country.

William and Mary, Williamsburg, VA (2019)

Presented lecture to the GIS and Districting course students centering on improving as well as potential adverse trade-offs from improvements of the adopted redistricting plan chosen by the special masters of the *Bethune-Hill v. Virginia State Bd. of Elections* redistricting case.

Southern Echo, Jackson, Mississippi (2019)

Provided detailed training/presentation (3 hours) on various aspects of redistricting. Topics included: Relevant redistricting court cases, traditional redistricting criteria, and redistricting data.

William and Mary, Williamsburg, VA (2018)

Presented lecture to the GIS and Districting course students centering on aspects of the *Bethune-Hill v. Virginia State Bd. of Elections* redistricting case. Discussion pertained to how to develop a plan that corrected the 11 unconstitutional racial gerrymandered states House districts.

Congressional Black Caucus Institute, Washington, DC (2016)

Presented at the annual legislative conference in Tunica, MS. Presented the election demographic analysis and for the 2016 presidential and Senate elections. Panel also included Congressman Cedrick Richmond (L.A.), Congressman Sanford Bishop (G.A.), and Professor Spencer Overton.

Coalition of Black Trade Unionists (CBTU), Chicago, IL (2015)

Presented at the annual CBTU conference on the election panel that included Congressman Al Green (TX) and Congressman Bobby Rush (I.L.).

Nobel Women's Initiative, Washington, DC (2015)

Presented on a panel at the annual conference in San Diego, CA, on the upcoming 2020 census.

Tennessee NAACP, Nashville, TN (2011)

Provided redistricting training session on the mapping and demographic aspects of Redistricting.

Congressional Black Caucus Institute, Washington, DC (2002 - 2012, 2014)

Presented "The Demographics of Campaigns" twelve times at the institute's annual political campaign "Boot Camp." The presentation covers how to locate and utilize demographic data for political campaigns.

Congressional Black Caucus Foundation (CBCF), Washington, DC (2011)

Presented as one of the panelists at the "Judge A. Leon Higginbotham" Braintrust at the CBC Annual Legislative Conference. The panel was moderated by Congressman Mel Watt.

The Advancement Project, Washington, DC (2011)

Trained staff GIS person on Maptitude for Redistricting as well as on redistricting scenarios.

National Association for the Advancement of Colored People, Baltimore, MA (2011)

Provided training session on "Redistricting Mapping Overview "at the organization's national redistricting training seminar for state and local chapters.

Congressional Black Caucus Institute, Washington, DC (2010)

Presented at the annual CBC Institute conference in Tunica, MS (The panel included Congressman John Lewis and Congressman Jim Clyburn). Outlined two critical issues that would surface in the 2010 round of redistricting: 1) Prison-based Gerrymander; and 2) The use of Citizen Voting Age Population (CVAP).

Community Census and Redistricting Institute (CCRI), Durham, NC (2010)

Developed, managed, and provided hands-on training for the Political Cartographer's side of a week-long intensive "redistricting expert" preparation workshop. The workshop trained 18 political cartographers on all aspects of plan development.

North Carolina University's Center for Civil Rights, Chapel Hill, NC (2010)

Provided presentation on "Redistricting Laws & GIS" at the *Unfinished Work* conference. The presentation outlined the evolution of major redistricting laws and GIS and their impact on minority representation.

NAACP Legal Defense Fund AIRLIE Conference, AIRLIE, VA (2010)

Provided training using hands-on "paper" redistricting scenario to voting rights advocates on developing a plan without the use of computers.

Young Elected Officials, Los Angeles, CA (2010)

Provided training using hands-on "paper" redistricting scenario to young legislators on developing a plan without the use of computers.

Young Elected Officials, Alexandria, VA (2010)

Provided overview training on the major aspects of redistricting to young legislators.

North Carolina University's Center for Civil Rights, Chapel Hill, NC (2006)

Provided presentation on "Congressional Elections Won by African Americans Race & Ethnicity District Perspective (1960 - 2004)" at the *Who Draws the Lines? The Consequences of Redistricting Reform for Minority Voters* conference.

Howard University - Continuing Education - HBCU GIS Workshop, Washington, DC (2002)

Provided presentation on redistricting and the use Maptitude for Redistricting to faculty members of Historically Black Colleges and Universities (HBCUs).

Norfolk State University Redistricting Project Training Workshops (1991 - 1998)

Provided redistricting training to the following:

- Alabama State University, Montgomery, Alabama
- Albany State University, Albany, Georgia
- Florida A & M, Tallahassee, Florida
- National Conference of Black Political Scientists, Atlanta, Georgia Conference
- Norfolk State University, Norfolk, Virginia
- North Carolina A & T State University, Greensboro, North Carolina
- North Carolina Central University, Durham, North Carolina
- Southern University, Baton Rouge, Louisiana
- Williams College, Williamstown, Massachusetts

Major GIS/Redistricting/Voter Data Software Experience:

- ArcGIS GIS Software Primary GIS Software after 2012 (ESRI)
- ArcGIS Online Including Story Maps & Web Application Builder (ArcGIS.com)
- GRASS GIS Open Source GIS (OSGeo)
- Maptitude for Redistricting Primary Redistricting software, since 2001 (<u>Caliper</u>)
- ESRI Redistricting Online Beta Tester (ESRI)
- Public Mapping Project Initial Advisory Board Member (an open source online software)

- GIS Plus (the precursor to Maptitude Software in the mid to late 1990s) User (<u>Caliper</u>)
- ReapS Redistricting and Reapportionment System Redistricting software, 1990s (LogiSYS)
- Voter Activation Network System <u>NPGVAN</u>
- Voterlistonline.com Aristotle software Aristotle

GIS Skillset/Coding Languages:

- Geocoding Data
- Linear Referencing
- Digital Cardinality
- Spatial Statistics
- Suitability Analysis

- Image Classification
- ArcGIS Web Services
- pdAdmin
- Python
- PostgreSQL

ESRI Training Certificates:

- Learning ArcGIS Desktop (for ArcGIS 10) 24 hrs training
- Turning Data into Information Using ArcGIS 10 18 hrs training
- Basics of Raster Data (for ArcGIS 10) 3 hrs training
- Using Raster Data for Site Selection (for ArcGIS 10) 3 hrs training
- Working with Geodatabase Domains and Subtypes in ArcGIS 3 hrs training
- Network Analysis Using ArcGIS 3 hrs training

Publications:

Books

- An Introduction to the Presidential Trend, Statistical Press, March 2015
- The Presidential Trend, Statistical Press, December 2013
- A Step by Step Guide to Using Census 2000 Data, MediaChannel LLC, March 2004. Also Included, a companion CD-ROM (sold through various Census-related workshops and training sessions and used in a political science course).

Manuals

 A Beginner's Guide To Using Census 2000 Data, November 2002 (Co-authored- developed for the U.S. Census Bureau's Census Information Centers)

Articles

 "Precision Voter Targeting: GIS Maps Out a Strategy," Geo Info Systems, November 1996 (Coauthored one of the first articles published on using modern-day GIS for voter targeting).

Recent Advisory Boards

- Redistricting Data Hub Advisory Board (redistricting data hub.org) (2020 to 2021)
- First Baptist Church of Hampton Trustee Board (Term: 2015 to Present)